Item no.: 397840
RUTM51

from **347,93 EUR**

Item no.: 397840
shipping weight: 0.60 kg
Manufacturer: Teltonika

📄 Product Description

The RUTM51 is a budget-friendly dual-SIM, multi-network industrial 5G router delivering connectivity for data-heavy applications. With five Gigabit Ethernet ports, dual-band Wi-Fi, and auto-failover, it ensures seamless, reliable performance. Backward compatibility with 4G Cat 12 and a versatile range of interfaces make the RUTM51 5G router a smart, future-proof choice for businesses seeking high-speed connectivity at a lower cost.COST-EFFICIENT 5GTop-tier 5G speeds at an unbeatable price pointDUAL SIMWith auto failover, backup WAN and other switching scenariosSA & NSASupports both architectures to leverage the 5G infrastructureFUTURE-PROOFINGBackward compatible with 4G (LTE Cat 12)MOBILE- Mobile module5G Sub-6GHz SA: 2 Gbps DL, 1 Gbps UL; NSA: 2.6 Gbps DL, 650 Mbps UL; 4G (LTE) - Cat 12: 600 Mbps DL, Cat 13: 150 Mbps UL; 3G - 42.2 Mbps DL, 11 Mbps UL- 3GPP ReleaseRelease 15- SIM switch2 SIM cards, auto-switch cases: weak signal, data limit, SMS limit, roaming, no network, network denied, data connection fail, SIM idle protection- StatusIMSI, ICCID, operator, operator state, data connection state, network type, CA indicator, bandwidth, connected band, signal strength (RSSI), SINR, RSRP, RSRQ, EC/IO, RSCP, data sent/received, LAC, TAC, cell ID, ARFCN, UARFCN, EARFCN, MCC, and MNC- SMSSMS status, SMS configuration, send/read SMS via HTTP POST/GET, EMAIL to SMS, SMS to EMAIL, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply, SMPP- USSDSupports sending and reading Unstructured Supplementary Service Data messages- Black/White listOperator black/white list (by country or separate operators)- Band managementBand lock, Used band status display- SIM idle protection serviceWhen working with devices with two SIM slots, the one not currently in use will remain idle until the device switches to it, meaning that no data is used on the card until then- SIM PIN code managementSIM PIN code management enables setting, changing, or disabling the SIM card's PIN- APNAuto APN- BridgeDirect connection (bridge) between mobile ISP and device on LAN- PassthroughRouter assigns its mobile WAN IP address to another device on LANWIRELESS- Wireless mode802.11b/g/n/ac Wave 2 (Wi-Fi 5) with data transmission rates up to 867 Mbps (Dual Band, MU-MIMO), 802.11n fast transition, Access Point (AP), Station (STA)- Wi-Fi securityWPA2-Enterprise: PEAP, WPA2-PSK, WPA-EAP, WPA-PSK, WPA3-SAE, WPA3-EAP, OWE; AES-CCMP, TKIP, Auto-cipher modes, client separation, EAP-TLS with PKCS#12 certificates, disable auto-reconnect, 802.11w Protected Management Frames (PMF)- SSID/ESSIDESSID stealth mode- Wi-Fi usersUp to 150 simultaneous connections- Wireless Connectivity FeaturesWireless mesh (802.11s), fast roaming (802.11r), Relayd, BSS transition management (802.11v), radio resource measurement (802.11k)- Wireless MAC filterWhitelist, blacklist- Wireless QR code generatorOnce scanned, a user will automatically enter your network without needing to input login information. ETHERNET- WAN1 x WAN port 10/100/1000 Mbps, compliance with IEEE 802.3, IEEE 802.3u, 802.3az standards, supports auto MDI/MDIX crossover- LAN 4 x LAN ports, 10/100/1000 Mbps, compliance with IEEE 802.3, IEEE 802.3u, 802.3az standards, supports auto MDI/MDIX crossoverNETWORK- RoutingStatic routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing- Network protocolsTCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, SFTP, FTP, SMTP, SSL/TLS, ARP, VRRP, PPP, PPPoE, UPNP, SSH, DHCP, Telnet, SMPP, SNMP, MQTT, Wake On Lan (WOL), VXLAN- VoIP passthrough supportH.323 and SIP-alg protocol NAT helpers, allowing proper routing of VoIP packets- Connection monitoringPing Reboot, Wget Reboot, Periodic Reboot, LCP and ICMP for link inspection- FirewallPort forward, traffic rules, custom rules, TTL target customisation- Firewall status pageView all your Firewall statistics, rules, and rule counters- Ports managementView device ports, enable and disable each of them, turn auto-configuration on or off, change their transmission speed, and so on- Network topologyVisual representation of your network, showing which devices are connected to which other devices- DHCPStatic and dynamic IP allocation, DHCP relay, DHCP server configuration, status, static leases: MAC with wildcards- QoS / Smart Queue Management (SQM)Traffic priority queuing by source/destination, service, protocol or port, WMM, 802.11e- DDNSSupported >25 service providers, others can be configured manually- DNS over HTTPSDNS over HTTPS proxy enables secure DNS resolution by routing DNS queries over HTTPS- Network backupWi-Fi WAN, Mobile, VRRP, Wired options, each of which can be used as an automatic Failover- Load balancingBalance Internet traffic over multiple WAN connections- HotspotCaptive portal (hotspot), internal/external Radius server, Radius MAC authentication, SMS authorisation, SSO authentication, internal/external landing page, walled garden, user scripts, URL parameters, user groups, individual user or group limitations, user management, 9 default customisable themes and optionality to upload and download customised hotspot themes- SSHFSPossibility to mount remote file system via SSH protocol- VRF supportInitial virtual routing and forwarding (VRF) support- Traffic ManagementReal-time monitoring, wireless signal charts, traffic usage history?SECURITY- AuthenticationPre-shared key, digital certificates, X.509 certificates, TACACS+, Internal & External RADIUS users authentication, IP & login attempts block, time-based login blocking, built-in random password generator- FirewallPre-configured firewall rules can be enabled via WebUI, unlimited firewall configuration via CLI; DMZ; NAT; NAT-T- Attack preventionDDOS prevention (SYN flood protection, SSH attack prevention, HTTP/HTTPS attack prevention), port scan prevention (SYN-FIN, SYN-RST, X-mas, NULL flags, FIN scan attacks)- VLANPort and tag-based VLAN separation- Mobile quota controlMobile data limit, customizable period, start time, warning limit, phone number- WEB filterBlacklist for blocking out unwanted websites, Whitelist for specifying allowed sites only- Access controlFlexible access control of SSH, Web interface, CLI and Telnet- SSL certificate generationLet's encrypt support- 802.1xPort-based network access control clientVPN- OpenVPNMultiple clients and a server can run simultaneously, 27 encryption methods- OpenVPN EncryptionDES-CBC 64, RC2-CBC 128, DES-EDE-CBC 128, DES-EDE3-CBC 192, DESX-CBC 192, BF-CBC 128, RC2-40-CBC 40, CAST5-CBC 128, RC2-64-CBC 64, AES-128-CBC 128, AES-128-CFB 128, AES-128-CFB1 128, AES-128-CFB8 128, AES-128-OFB 128, AES-128-GCM 128, AES-192-CFB 192, AES-192-CFB1 192, AES-192-CFB8 192, AES-192-OFB 192, AES-192-CBC 192, AES-192-GCM 192, AES-256-GCM 256, AES-256-CFB 256, AES-256-CFB1 256, AES-256-CFB8 256, AES-256-OFB 256, AES-256-CBC 256- IPsecXFRM, IKEv1, IKEv2, with 14 encryption methods for IPsec (3DES, DES, AES128, AES192, AES256, AES128GCM8, AES192GCM8, AES256GCM8, AES128GCM12, AES192GCM12, AES256GCM12, AES128GCM16, AES192GCM16, AES256GCM16)- GREGRE tunnel, GRE tunnel over IPsec support- PPTP, L2TPClient/Server instances can run simultaneously, L2TPv3, L2TP over IPsec support- StunnelProxy designed to add TLS encryption functionality to existing clients and servers without any changes in the program's code- DMVPNMethod of building scalable IPsec VPNs, Phase 2 and Phase 3 and Dual Hub support- SSTPSSTP client instance support- ZeroTierZeroTier VPN client support- WireGuardWireGuard VPN client and server support- TincTinc offers encryption, authentication and compression in it's tunnels. Client and server support.- TailscaleTailscale offers speed, stability, and simplicity over traditional VPNs. Encrypted point-to-point connections using the open source WireGuard protocolOPC UA- Supported modesClient, Server- Supported connection typesTCPMODBUS- Supported modesServer, Client- Supported connection typesTCP, USB- Custom registersMODBUS TCP custom register block requests, which read/write to a file inside the router, and can be used to extend MODBUS TCP Client functionality- Supported data formats8-bit: INT, UINT; 16-bit: INT, UINT (MSB or LSB first); 32-bit: float, INT, UINT (ABCD (big-endian), DCBA (little-endian), CDAB, BADC), HEX, ASCIIDATA TO SERVER- ProtocolHTTP(S), MQTT, Azure MQTT, Kinesis- Data to serverExtract parameters from multiple sources and different protocols, and send them all to a single server; Custom LUA scripting, allowing scripts to utilize the router's Data to server featureMQTT GATEWAY- Modbus MQTT GatewayAllows sending commands and receiving data from MODBUS Server through MQTT brokerDNP3- Supported modesStation, Outstation- Supported connectionTCP, USBDLMS- DLMS SupportDLMS - standard protocol for utility meter data exchange- Supported modesClientAPI- Teltonika Networks Web API (beta) supportExpand your device's possibilities by using a set of configurable API endpoints to retrieve or change data. For more information, please refer to this documentation: https://developers.teltonika-networks.comMONITORING & MANAGEMENT- WEB UIHTTP/HTTPS, status, configuration, FW update, CLI, troubleshoot, unlimited event log viewers, firmware update availability notifications, event log, system log, kernel log, Internet status- FOTAFirmware update from server, automatic notification- SSHSSH (v1, v2)- SMSSMS status, SMS configuration, send/read SMS via HTTP POST/GET- CallReboot, Status, Mobile data on/off, Output on/off, answer/hang-up with a timer, Wi-Fi on/off- TR-069OpenACS, EasyCwmp, ACSLite, tGem, LibreACS, GenieACS, FreeACS, LibCWMP, Friendly tech, AVSystem- MQTTMQTT Broker, MQTT publisher- SNMPSNMP (v1, v2, v3), SNMP Trap, Brute force protection- JSON-RPCManagement API over HTTP/HTTPS- MODBUSMODBUS TCP status/control- RMSTeltonika Remote Management System (RMS)IOT PLATFORMS- ThingWorxAllows monitoring of: WAN Type, WAN IP, Mobile Signal Strength, Mobile Network Type- Cumulocity - Cloud of ThingsAllows monitoring of: Device Model, Revision and Serial Number, WAN Type and IP, Mobile Cell ID, ICCID, IMEI, Connection Type, Operator, Signal Strength. Has reboot and firmware upgrade actions- Azure IoT HubCan be configured with Data to Server to send all the available parameters to the cloud. Has Direct method support which allows to execute RutOS API calls on the IoT Hub. Also has Plug and Play integration with Device Provisioning Service that allows zero-touch device provisioning to IoT HubsSYSTEM CHARACTERISTICS- CPUMediaTek, Dual-core, 880 MHz, MIPS1004KC- RAM256 MB, DDR3- FLASH storage16MB serial NOR flash, 256MB serial NAND flashFIRMWARE / CONFIGURATION- WEB UIUpdate FW from file, check FW on server, configuration profiles, configuration backup- FOTAUpdate FW- RMSUpdate FW/configuration for multiple devices at once- Keep settingsUpdate FW without losing current configuration- Factory settings resetA full factory reset restores all system settings, including the IP address, PIN, and user data to the default manufacturer's configurationFIRMWARE CUSTOMISATION- Operating systemRutOS (OpenWrt based Linux OS)- Supported languagesBusybox shell, Lua, C, C++- Development toolsSDK package with build environment provided- GPL customizationYou can create your own custom, branded firmware and web page application by changing colours, logos, and other elements in our firmware to fit your or your clients' needs- Package ManagerThe Package Manager is a service used to install additional software on the deviceUSB- Data rateUSB 2.0- ApplicationsSamba share, USB-to-serial- External devicesPossibility to connect external HDD, flash drive, additional modem, printer, USB-serial adapter- Storage formatsFAT, FAT32, exFAT, NTFS (read-only), ext2, ext3, ext4INPUT / OUTPUT- Input1 x Configurable digital Input, 0 - 6 V detected as logic low, 8 - 50 V detected as logic high- Output1 x Configurable digital Output, Open collector output, max output 50 V, 300 mA- EventsEmail, RMS, SMS- I/O jugglerAllows to set certain I/O conditions to initiate eventPOWER- Connector4-pin industrial DC power socket- Input voltage range9 – 50 VDC, reverse polarity protection, surge protection >51 VDC 10us max- PoE (passive)Possibility to power up through LAN1 port, not compatible with IEEE802.3af, 802.3at and 802.3bt standards, Mode B, 9 - 50 VDC- Power consumptionIdle: <5 W, Max: <18 WPHYSICAL INTERFACES- Ethernet5 x RJ45 ports, 10/100/1000 Mbps- I/O's1 x Digital Input, 1 x Digital Output on 4-pin power connector- Status LEDs3 x connection status LEDs, 3 x connection strength LEDs, 10 x Ethernet port status LEDs, 4 x WAN status LEDs, 1 x Power LED, 2 x 2.4G and 5G Wi-Fi LEDs- SIM2 x SIM slots (Mini SIM – 2FF), 1.8 V/3 V- Power1 x 4-pin power connector- Antennas4 x SMA for Mobile, 2 x RP-SMA for Wi-Fi- USB1 x USB A port for external devices- ResetReboot/User default reset/Factory reset buttonOther1 x Grounding screwPHYSICAL SPECIFICATION- Casing materialAluminium housing- Dimensions (W x H x D)132 x 44.2 x 95.0 mm- Weight525 g- Mounting optionsDIN rail, wall mount, flat surface (all require additional kit)OPERATING ENVIRONMENT- Operating temperature-40 °C to 75 °C- Operating humidity10% to 90% non-condensing- Ingress Protection RatingIP30REGULATORY & TYPE APPROVALS- CE, UKCA, EAC, UCRF, RCM, WEEE, CBEMC EMISSIONS & IMMUNITY- StandardsEN 55032:2015+ A11:2020 + A1:2020EN 55035:2017+A11:2020EN 61000-3-3:2013+A1:2019+A2:2021EN IEC 61000-3-2:2019+A1:2021EN 301 489-1 V2.2.3EN 301 489-3 V2.3.2EN 301 489-17 V3.2.4EN 301 489-52 V1.2.1AS/NZS CISPR 32:2015+A1:2020- ESDEN 55032:2015+ A11:2020 + A1:2020EN 55035:2017+A11:2020EN 61000-3-3:2013+A1:2019+A2:2021EN IEC 61000-3-2:2019+A1:2021EN 301 489-1 V2.2.3EN 301 489-3 V2.3.2EN 301 489-17 V3.2.4EN 301 489-52 V1.2.1AS/NZS CISPR 32:2015+A1:2020- Radiated ImmunityEN 61000-4-3:2006 + A1:2008 + A2:2010, EN IEC 61000-4-3:2020- EFTEN 61000-4-4:2012, EN 61000-4-4:2012- Surge Immunity (AC Mains Power Port)EN 61000-4-5:2014+A1:2017, EN 61000-4-5:2014+A1:2017- CSEN 61000-4-6:2014- DIPEN 61000-4-11:2020RF- StandardsEN 300 328 V2.2.2EN 301 893 V2.1.1EN 300 440 V2.2.1EN 301 908-1 V15.2.1EN 301 908-2 V13.1.1EN 301 908-13 V13.2.1EN 301 908-25 V15.1.1AS/NZS 4268:2017+A1:2021AS/CA S042.1:2022AS/CA S042.4:2022AS/CA S042.5:2022+A1:2022FCC Part 22SAFETY- StandardsEN IEC 62311:2020EN IEC 62368-1:2020+A11:2020AS/NZS 2772.2:2016+A1:2018

📄 Specifications